



Environmental Engineering and Consulting
Remediation and Management Services

December 14, 2009

Colorado Department of Public Health and Environment
HMWMD-RP-D2
4300 Cherry Creek Drive South
Denver, Colorado 80222-1530

Attention: Mr. Mark Rudolph

Subject: Addendum #1 - Investigation Report, Identification and Confirmation of Soils
Requiring Long Term Management, Valmont Butte, Boulder, Colorado

Dear Mr. Rudolph:

On behalf of the City of Boulder, Casey Resources, Inc. (CRI) has prepared this Addendum #1 to the report entitled "Investigation Report, Identification and Confirmation of Soils Requiring Long Term Management" (Investigation Report) provided to the Colorado Department of Public Health & Environment (CDPHE) on November 24, 2009. Addendum #1 has been prepared to address two previous verbal comments from CDPHE personnel. These are as follows:

1. Provide a figure that combines the 50-foot grid investigation areas (Investigation Report Figure 7) and the 200-foot grid sampling location layout (Investigation Report Figure 4), and
2. The west end of the North Hillside should be included in the screening of the North Hillside. Please provide surface soil sampling data for this area.

These two comments are addressed as follows:

Response to Comment #1

In response to Comment #1, we have attached "Figure A 50 Foot Investigation Areas and 200 Foot Grid Sampling Locations Overlay". As presented in the Investigation Report, the 50 Foot Investigation Areas were not screened on an established 50 foot grid primarily due to physical constraints (structures, vegetation, topography, etc); however, these areas were screened at close spacing (25 feet or less) between sampling locations.

Response to Comment #2

On November 25, 2009, CRI personnel completed in-situ surface soil sampling along the west end of the North Hillside at Valmont Butte (Figure 1-A). The area to the east had previously



been screened and presented in the Investigation Report (see Figure 8 Lead Investigation - North Hillside). The in-situ sampling measurements for possible lead and arsenic concentrations in surface soil were collected using a portable X-ray Fluorescence Spectrometer (XRF).

A total of 32 surface readings were taken at intervals of approximately 100 feet or less. The measurement locations are shown on Figure 1-A and the measurement results are presented on Table 1-A. The results provided on Table 1-A include adjusted (corrected) concentrations for arsenic and lead based on the correction factors discussed in the Investigation Report (see Appendix A of the Investigation Report). As shown on Table 1-A, lead concentrations in this screening area were less than the lead screening value of 800 milligrams per kilograms (mg/Kg).

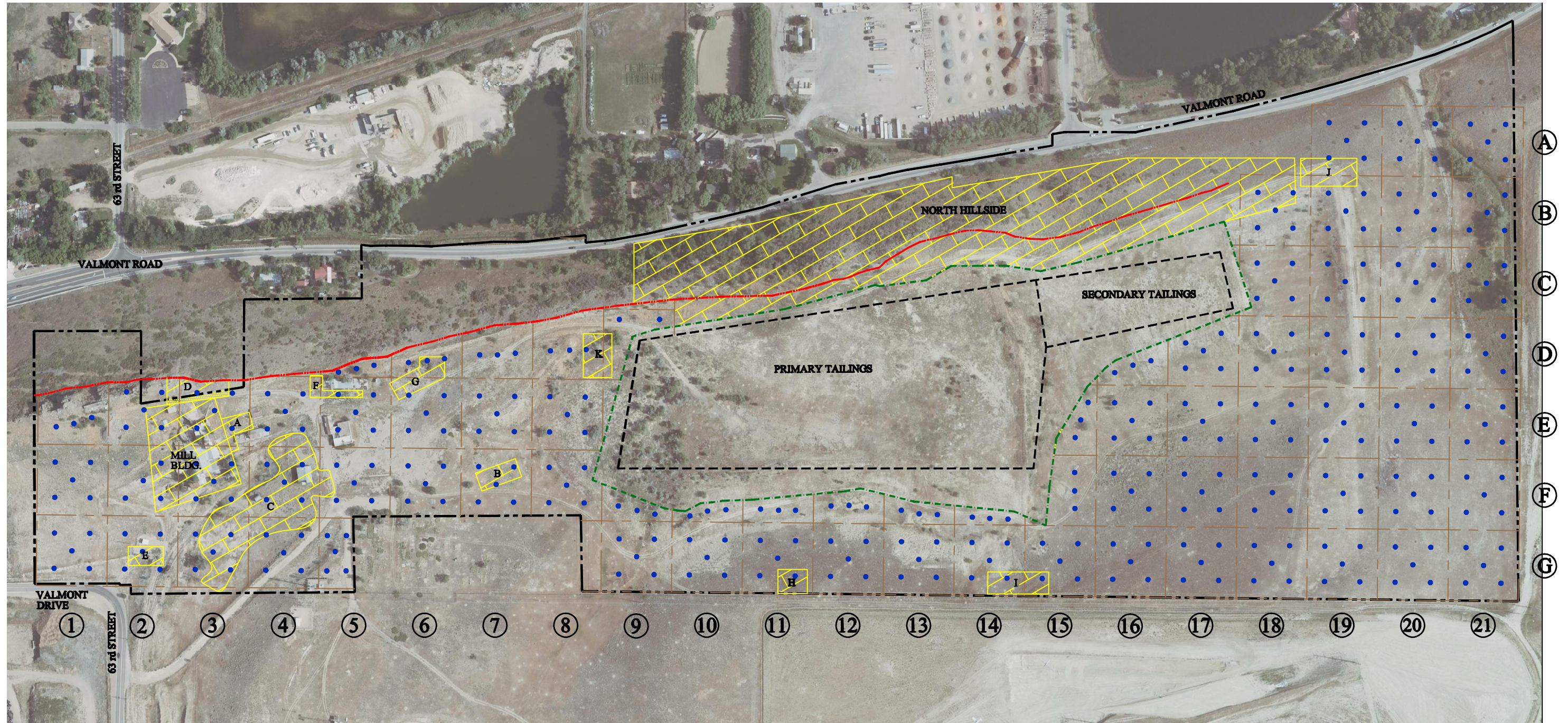
We trust that the information provided in this letter addresses your comments. Please contact Paul Casey or me with any comments or questions.

Sincerely,
CASEY RESOURCES, INC.

Terry O. McGowan, P.G.
Associate

Attachments: Figure A and Figure 1-A
Table 1-A

cc: Edgar Ethington, CDPHE
Maureen Rait, City of Boulder
Bill Boyes, City of Boulder
Elizabeth Temkin, TWH



EXPLANATION

- | | | | |
|-------|---------------------------|---|---|
| ----- | Property Boundary | A | 50-Foot Grid Sampling Area |
| ----- | Covenant Boundary | • • • | 200-Foot Grid and Soil Sample Locations |
| ----- | Prairie Dog Control Fence | | |
| ----- | Valmont Butte Ridge | | |

Scale: 1.0 Inch = 300'
Aerial Photograph from Google Earth

Valmont Butte Property Boundary based on
April 14, 2000 Land Survey Plat

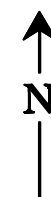


FIGURE A

"50 FOOT INVESTIGATION AREAS AND
200 FOOT GRID SAMPLING LOCATIONS OVERLAY"
VALMONT BUTTE PROPERTY
3000 NORTH 63rd STREET
BOULDER, COLORADO



EXPLANATION

- Lead Concentration 800 mg/Kg or greater
- Lead Concentration Less Than 800 mg/Kg

Note: mg/Kg = Milligrams per Kilogram



FIGURE 1-A

**LEAD INVESTIGATION – WEST END OF NORTH HILLSIDE
VALMONT BUTTE PROPERTY
3000 NORTH 63RD STREET
BOULDER, COLORADO**

TABLE 1-A
West End of North Hillside Lead and Arsenic Data

Sample Location	Date	As	As +/-	Pb	Pb +/-	As Adjusted	Pb Adjusted
1	25-Nov-09	<LOD	22	349	9	< 19	394
2	25-Nov-09	<LOD	12	195	5	< 11	230
3	25-Nov-09	<LOD	22	102	8	< 19	126
4	25-Nov-09	<LOD	36	684	15	< 32	735
5	25-Nov-09	<LOD	21	215	8	< 18	252
6	25-Nov-09	<LOD	21	224	8	< 18	262
7	25-Nov-09	<LOD	21	246	8	< 18	285
8	25-Nov-09	<LOD	18	170	7	< 16	203
9	25-Nov-09	<LOD	23	233	9	< 20	271
10	25-Nov-09	<LOD	25	244	10	< 22	283
11	25-Nov-09	<LOD	18	135	7	< 16	164
12	25-Nov-09	<LOD	18	144	7	< 16	174
13	25-Nov-09	<LOD	14	58	5	< 12	75
14	25-Nov-09	<LOD	11	67	4	< 10	86
15	25-Nov-09	<LOD	14	75	5	< 12	95
16	25-Nov-09	<LOD	27	164	10	< 24	196
17	25-Nov-09	<LOD	18	145	7	< 16	175
18	25-Nov-09	<LOD	20	143	8	< 18	173
19	25-Nov-09	<LOD	19	131	7	< 17	159
20	25-Nov-09	<LOD	20	502	8	< 18	552
21	25-Nov-09	<LOD	19	139	7	< 17	168
22	25-Nov-09	<LOD	29	360	11	< 25	406
23	25-Nov-09	<LOD	19	110	7	< 17	136
24	25-Nov-09	<LOD	16	103	6	< 14	128
25	25-Nov-09	<LOD	19	232	7	< 17	270
26	25-Nov-09	<LOD	13	83	5	< 11	104
27	25-Nov-09	<LOD	16	43	6	< 14	57
28	25-Nov-09	<LOD	15	72	6	< 13	92
29	25-Nov-09	<LOD	19	117	7	< 17	143
30	25-Nov-09	<LOD	14	116	5	< 12	142
31	25-Nov-09	<LOD	13	71	5	< 11	90
32	25-Nov-09	<LOD	9	23	3	< 8	32

All concentration values are in milligrams per kilogram as measured by X-ray Fluorescence (XRF)

<LOD - Less than the "Level of Detection" As +/- and Pb +/- represent the detection limits associated with XRF results

As - Arsenic

Pb - Lead

Red - Adjusted lead concentration* greater than 800 mg/Kg (lead action concentration)

Adjusted lead concentrations* with no color are less than 800 mg/Kg

Note: Where the arsenic concentration was less than LOD, the LOD was used to obtain the adjusted value

* Lead concentrations by XRF analysis adjusted to presumed laboratory values via regression analysis formula

** Arsenic concentrations by XRF analysis adjusted to presumed laboratory values via regression analysis formula

